

10A – MUNIS Security

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- Introduce and familiarize you with MUNIS security and managing user access using the Role Based Security programs

User access is established to:

- Allow a user to access to MUNIS
- Define the users available menu options
- Define the buttons or icons available in a program
- Determine the fields, their contents and processes a user may perform
- Establish defaults for users

What is it?

- A system of controlling user access based upon the role(s) of the user
- Permissions based upon a defined role
- Built upon common Role Based Access Control (RBAC) standards

Why the change?

- Facilitates managing groups of users with common roles and responsibilities

Benefits:

- Maintain roles not users
- Assign various pre-defined roles to users
- Changing roles mass changes users
- Easy to add a new user
- Easy to add new MUNIS permissions

“Deny all except” policy

- Defaults to the least amount of access
- No role or user has access to a function or data unless assigned by the administrator!
- Includes permission check boxes AND data access

Role Maintenance

- Role Permissions & Data Access
- Menu Access/Quick links

User Account Maintenance

- Establish basic user info
- Assign Roles
- Define user specific attributes
- Workflow

Role Maintenance

Role Maintenance - MUNIS [City of MUNIS Development]

My File Edit Tools Help

Role

Role Key **Role status**

Description **Last updated** at

Menu access

Quick link

View Changes

Copy Role

Module View | **Role Permissions** | Role Data Access | Menu Security | Assigned Users

General	HR / Payroll	Productivity Tools
<input type="text" value="MUNIS System"/>	<input type="text" value="HR Management / Payroll"/>	<input type="text" value="Jury Selection"/>
		<input type="text" value="Voter"/>
Financials	General Revenues	Property Revenues
<input type="text" value="Accounts Payable"/>	<input type="text" value="Accounts Receivable"/>	<input type="text" value="Accounts Receivable"/>
<input type="text" value="Bid Management"/>	<input type="text" value="Animal Licenses"/>	<input type="text" value="Business Licenses"/>
<input type="text" value="Budget"/>	<input type="text" value="General Billing"/>	<input type="text" value="Central Property File"/>
<input type="text" value="Contract Management"/>	<input type="text" value="Parking Tickets"/>	<input type="text" value="Permits and Code Enforcement"/>
<input type="text" value="Fixed Assets"/>	<input type="text" value="Virginia State Income Tax"/>	<input type="text" value="Property Tax Administration"/>
<input type="text" value="General Ledger"/>		<input type="text" value="Tax Lien"/>
<input type="text" value="Inventory"/>		<input type="text" value="Tax Sale"/>
<input type="text" value="Purchase Orders"/>		<input type="text" value="Utility Billing"/>
<input type="text" value="Requisitions"/>		
<input type="text" value="Work Orders, Fleet and Facilities"/>		

0 of 0

Displays the history of changes for this Role.

OVR

- Purpose: Establish and manage permissions based upon a defined role:
 - Module/function permissions
 - Data access permissions
 - Menu permissions
- Changing role permissions changes assigned user permissions
- Must define at least one role

Module View Tab

Role Maintenance - MUNIS [City of MUNIS Development]

My File Edit Tools Help

Role

Role Key: [] Role status: []

Description: [] Last updated: [] at []

Menu access: []

Quick link: []

Module View | Role Permissions | Role Data Access | Menu Security | Assigned Users

General | HR / Payroll

MUNIS System | HR Management

Financials | General Revenue

Accounts Payable | Accounts Rec

Bid Management | Animal Licens

Budget | General Billing

Contract Management | Parking Ticke

Fixed Assets | Virginia State

General Ledger

Inventory

Purchase Orders

Requisitions

Work Orders, Fleet and Facilities

0 of 0

Displays the history of changes for this Role.

Accounts Payable Role Maintenance

My File Edit Tools Help

Role

Role ID: AP_ENTRY

Description: Accounts Payable Invoice Entry, Inquiry and Reporting

Role is active

Role parameters and permissions

<input type="checkbox"/> Maintain miscellaneous codes	Maintain vendors: No
<input type="checkbox"/> Maintain audit records	<input type="checkbox"/> Allow vendor name maintenance
<input type="checkbox"/> Maintain check reconciliation	<input type="checkbox"/> Post own invoices
<input checked="" type="checkbox"/> Access to the warrant in Invoice Entry	Post others' invoices: No
<input checked="" type="checkbox"/> Access to the Org when PO is liquidated	Maintain invoices: Yes
<input checked="" type="checkbox"/> Access to the Object when PO is liquidated	Maintain recurring invoices: No
<input checked="" type="checkbox"/> Access to the Project when PO is liquidated	PO number entry on invoices: Not required, but if entered, PO # can be invalid
<input type="checkbox"/> Override invoice variance	
<input checked="" type="checkbox"/> Override PO vendor	
<input type="checkbox"/> Add vendors on-the-fly	
<input type="checkbox"/> View SSNs	
<input type="checkbox"/> Stale check processing	
<input type="checkbox"/> Generate AP holding records	
<input type="checkbox"/> Are original Invoice not required for credit memo invoices?	
<input type="checkbox"/> Override credit memo defaults	

Data Access

Vendor maintenance access by type: Full

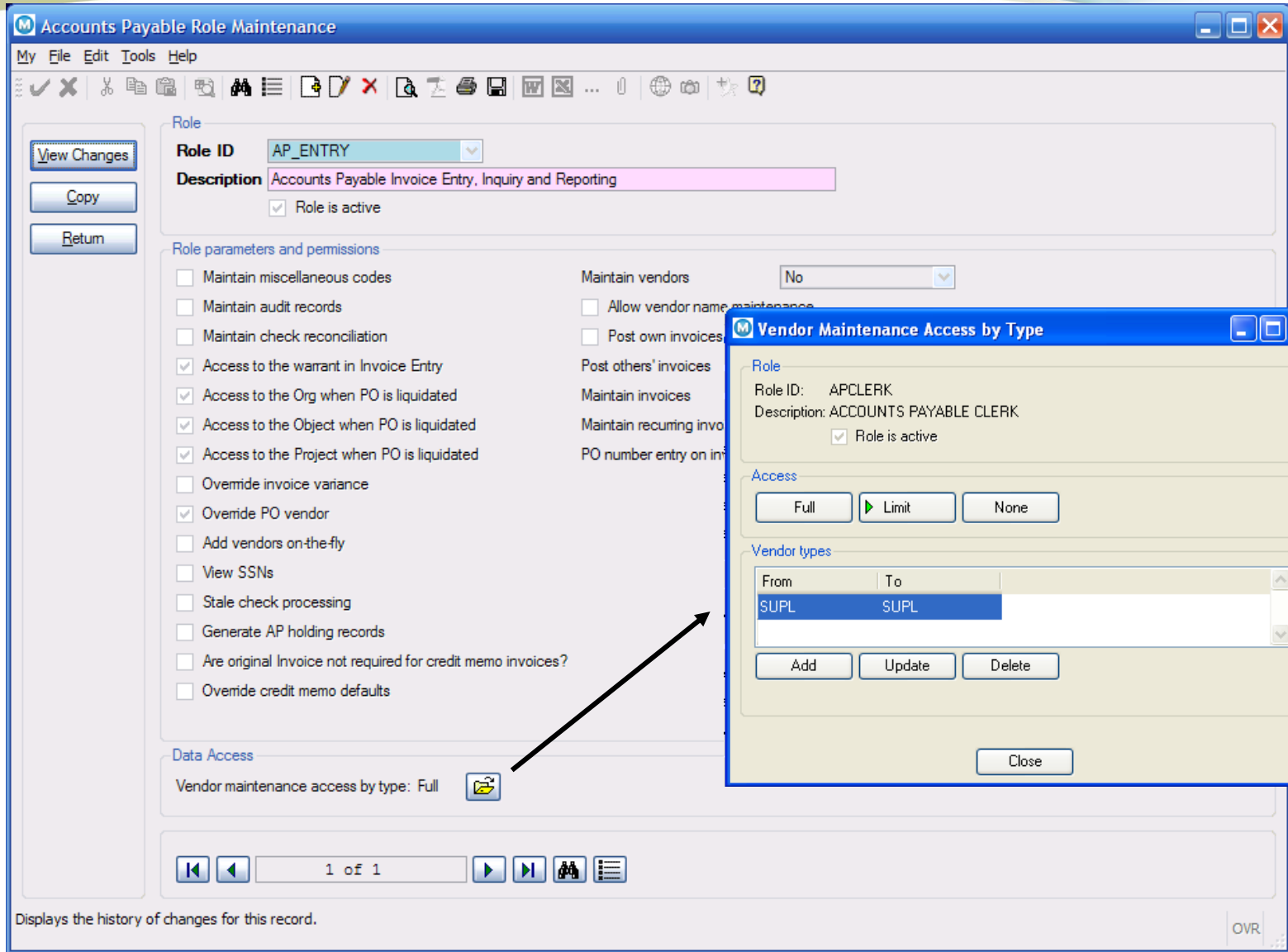
1 of 1

Displays the history of changes for this record.

OVR

- Used to establish module permissions for a role
- Must Add module to a role to gain and establish permissions
- Yellow folder denotes defined permissions/parameters for the role
- Some modules contain data access buttons to establish data access or restrictions

Data Access



Accounts Payable Role Maintenance

My File Edit Tools Help

Role

Role ID: AP_ENTRY

Description: Accounts Payable Invoice Entry, Inquiry and Reporting

Role is active

Role parameters and permissions

- Maintain miscellaneous codes
- Maintain audit records
- Maintain check reconciliation
- Access to the warrant in Invoice Entry
- Access to the Org when PO is liquidated
- Access to the Object when PO is liquidated
- Access to the Project when PO is liquidated
- Override invoice variance
- Override PO vendor
- Add vendors on-the-fly
- View SSNs
- Stale check processing
- Generate AP holding records
- Are original Invoice not required for credit memo invoices?
- Override credit memo defaults

Maintain vendors: No

- Allow vendor name maintenance
- Post own invoices
- Post others' invoices
- Maintain invoices
- Maintain recurring invoices
- PO number entry on invoices

Data Access

Vendor maintenance access by type: Full

1 of 1

Displays the history of changes for this record.

Vendor Maintenance Access by Type

Role

Role ID: APCLERK

Description: ACCOUNTS PAYABLE CLERK

Role is active

Access

Full Limit None

Vendor types

From	To
SUPL	SUPL

Add Update Delete

Close

- Establishes data access for a role
- Administrator must establish some level of access otherwise no access is available! (Deny all except...)

Role Permissions Tab

Role Maintenance - MUNIS [City of MUNIS Development]

My File Edit Tools Help

View Changes
Copy Role

Role

Role Key APCLERK Role status: Active

Description ACCOUNTS PAYABLE CLERK Last updated: 04/30/2007 at 10:32:19

Menu access MUNIS Main menu

Quick link []

Module View **Role Permissions** Role Data Access Menu Security Assigned Users (0)

Product	Module	Permission	Value
Financial Management	Accounts Payable	Override PO vendor	No
Financial Management	Accounts Payable	Override credit memo defaults	No
Financial Management	Accounts Payable	Override invoice variance	No
Financial Management	Accounts Payable	PO number entry on invoices	Required and PO # mu
Financial Management	Accounts Payable	Post others' invoices	Yes
Financial Management	Accounts Payable	Post own invoices	No
Financial Management	Accounts Payable	Stale checks processing	No
Financial Management	Accounts Payable	View AP documents	Yes
Financial Management	Accounts Payable	View SSNs	No
System / Internal	System Administration	Access the 'Direct Run' menu o	No
System / Internal	System Administration	Create new mail merge template	No
System / Internal	System Administration	Entity code restriction	City
System / Internal	System Administration	Maintain existing mail merge terr	No
System / Internal	System Administration	Modify MUNIS screen forms	No
System / Internal	System Administration	Query count audit threshold	0
System / Internal	System Administration	Restrict to 'Public Access' use c	Yes
System / Internal	System Administration	Scheduler Engine administrator	No
System / Internal	System Administration	Scheduler file maintenance acc	Personal
System / Internal	System Administration	Spool file maintenance access	Personal
System / Internal	System Administration	Submit jobs to be scheduled	No

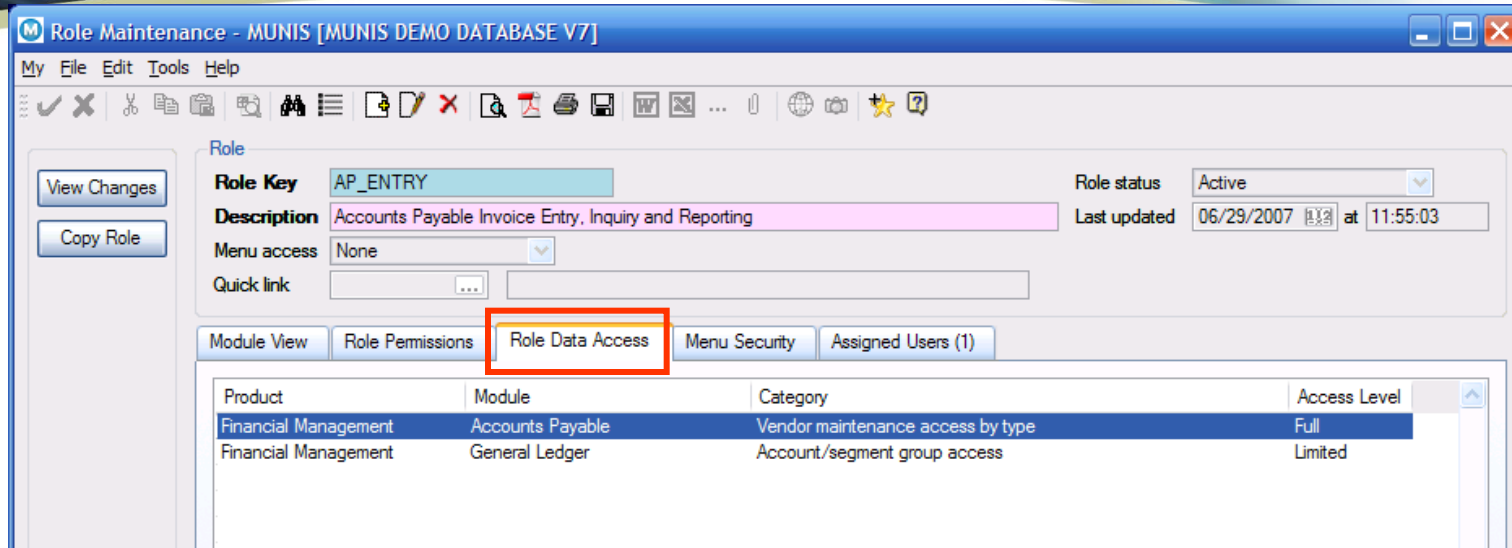
Add Module Edit Module Remove Module

1 of 1

OVR

- Same permission information as Module View tab just presented differently
- Provides ability to view, update or add permissions defined to a role from one screen
- The Add, Edit and Delete Module buttons provide access to module

Role Data Access



- Provides a view of all data access established in all modules for the current role
- Select Detail button to view or change the data access established

Menu Security

Role Maintenance - MUNIS [MUNIS DEMO DATABASE V7]

My File Edit Tools Help

Role

Role Key: AP_ENTRY Role status: Active

Description: Accounts Payable Invoice Entry, Inquiry and Reporting Last updated: 06/29/2007 at 12:01:21

Menu access: Quick Link

Quick link: None

MUNIS Main menu

Quick Link

Module View: Data Access Menu Security Assigned Users (1)

Top Back Forward Edit

Current

Access	#	Type	Caption	Prg/Menu	Parameters
<input checked="" type="checkbox"/>	A	M - Menu ->	Financials	acbdmain	
<input checked="" type="checkbox"/>	B	M - Menu ->	Payroll/Personnel	hmain	
<input checked="" type="checkbox"/>	C	M - Menu ->	General Revenues	grvmain	
<input checked="" type="checkbox"/>	D	M - Menu ->	Property Revenues	prvmain	
<input checked="" type="checkbox"/>	E	M - Menu ->	Other	miscmain	
<input checked="" type="checkbox"/>	F	M - Menu ->	Dept	deptmain	
<input checked="" type="checkbox"/>	G	M - Menu ->	My Reports	myreport	
<input checked="" type="checkbox"/>	H	M - Menu ->	Admin	admnmain	

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Type of menu access this role allows. OVR

- Menu Security established ONLY on roles not User Accounts
- View and maintain all menu security from this screen
- Menu Access Options:
 - Menu
 - Quick Links
 - None

Menu Access - MUNIS Main Menu



Role Maintenance - MUNIS [MUNIS DEMO DATABASE V7]

My File Edit Tools Help

Role

Role Key AP_ENTRY **Role status** Active

Description Accounts Payable Invoice Entry, Inquiry and Reporting **Last updated** 06/29/2007 at 12:01:21

Menu access Quick Link

Quick link None

Quick link MUNIS Main menu

Module View Quick Link Data Access Menu Security Assigned Users (1)

Top Back Forward Edit

Current

Access	#	Type	Caption	Prg/Menu	Parameters
<input checked="" type="checkbox"/>	A	M - Menu ->	Financials	acbdmain	
<input checked="" type="checkbox"/>	B	M - Menu ->	Payroll/Personnel	hmain	
<input checked="" type="checkbox"/>	C	M - Menu ->	General Revenues	grvmain	
<input checked="" type="checkbox"/>	D	M - Menu ->	Property Revenues	prvmain	
<input checked="" type="checkbox"/>	E	M - Menu ->	Other	miscmain	
<input checked="" type="checkbox"/>	F	M - Menu ->	Dept	deptmain	
<input checked="" type="checkbox"/>	G	M - Menu ->	My Reports	myreport	
<input checked="" type="checkbox"/>	H	M - Menu ->	Admin	admmain	

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Type of menu access this role allows. OVR

- Very similar to previous Menu Security
- Displays Main menu options on screen and allows admin to change access
- Ability to drill down to view and allow/restrict access to other menus and programs

Menu Access – Quick Links

Role Maintenance - MUNIS [MUNIS DEMO DATABASE V7]

My File Edit Tools Help

Role

Role Key: AP_ENTRY Role status: Active

Description: Accounts Payable Invoice Entry, Inquiry and Reporting Last updated: 06/29/2007 at 13:58:52

Menu access: Quick Link

Quick link: apmain Accounts Payable (MENU)

Module View Role Permissions Role Data Access Menu Security Assigned Users (1)

Current: Accounts Payable

Access	#	Type	Caption	Prg/Menu	Parameters
<input type="checkbox"/>	A	M - Menu ->	Auxiliary Programs	apaux	
<input checked="" type="checkbox"/>	B	M - Menu ->	Invoice Processing Menu	apinv	
<input checked="" type="checkbox"/>	C	M - Menu ->	Cash Disbursements Menu	apcash	
<input checked="" type="checkbox"/>	D	M - Menu ->	Vendor Maint/Reports Menu	apvdr	
<input checked="" type="checkbox"/>	F	M - Menu ->	Invoice Inquiry/Reports Menu	apprt	
<input type="checkbox"/>	G	M - Menu ->	A/P Workflow Admin	apworkfl	

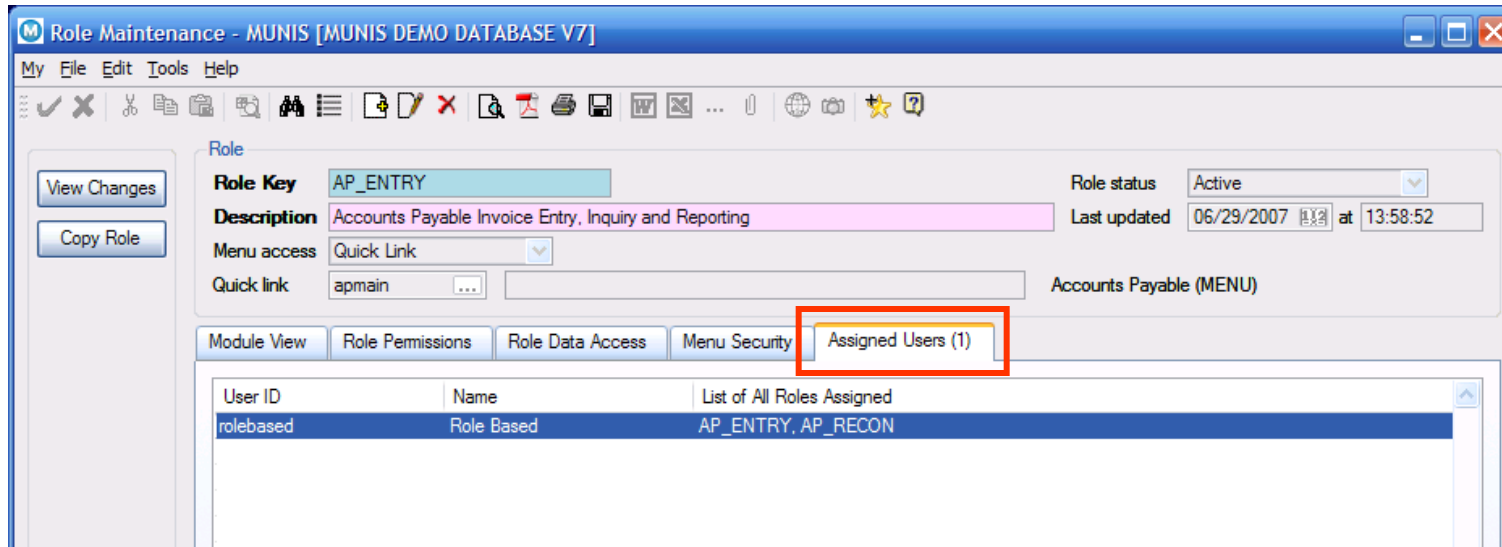
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OVR

- Incorporates menu security with the old style option to launch MUNIS from a certain point/program.
- Select a starting menu or program using a drill down screen
- Allow/restriction options within selected menu or sub-menus
- Quick Links can appear as a separate menu

Assigned Users



The screenshot shows the 'Role Maintenance' application window for 'MUNIS [MUNIS DEMO DATABASE V7]'. The 'Role' section displays the following details:

- Role Key:** AP_ENTRY
- Description:** Accounts Payable Invoice Entry, Inquiry and Reporting
- Role status:** Active
- Menu access:** Quick Link
- Quick link:** apmain
- Last updated:** 06/29/2007 at 13:58:52
- Accounts Payable (MENU)**

The 'Assigned Users (1)' tab is selected and highlighted with a red box. Below it, a table lists the assigned users:

User ID	Name	List of All Roles Assigned
rolebased	Role Based	AP_ENTRY, AP_RECON

- View all users assigned to a role
- Manage (add, delete etc.) users to role

User Account Maintenance



User Account Maintenance - MUNIS [City of MUNIS Development]

My File Edit Tools Help

View Changes
Copy
Reset files
LDAP Synch

User information

User ID User account status
Name MUNIS employee no.
Short name Department code
Initials Supervisor

Account detail

Work phone Workflow delivery
E-mail address
Default printer

Roles Effective Permissions Data Access Attributes Menu Workflow Detail

Code	Description	Status	Effective Start	Effective End	Grants access to
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Add Update Delete Edit Role View Changes

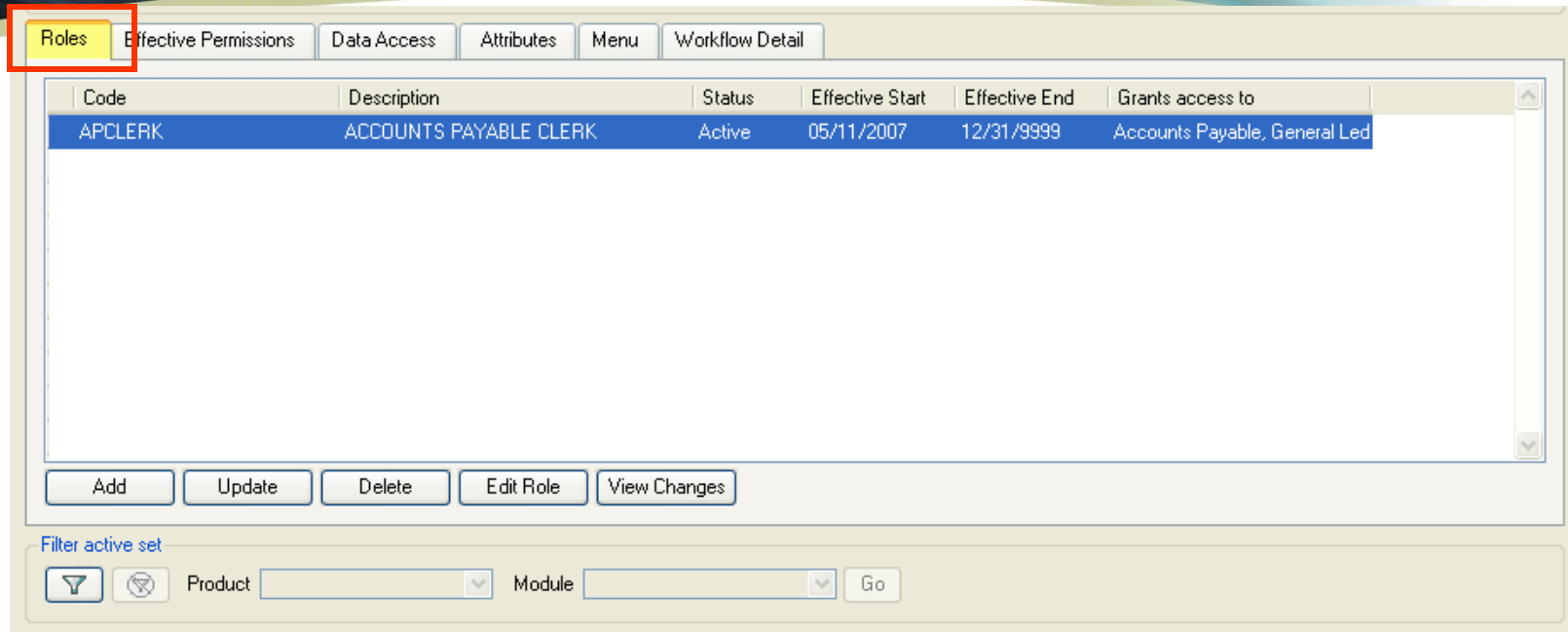
Filter active set

Product Module Go

0 of 0

- Add/delete/change user accounts
- Designate employee #, department code, email address, workflow delivery etc.
- Account status (active/inactive)
- Assign roles

User Account - Roles



Roles Effective Permissions Data Access Attributes Menu Workflow Detail

Code	Description	Status	Effective Start	Effective End	Grants access to
APCLERK	ACCOUNTS PAYABLE CLERK	Active	05/11/2007	12/31/9999	Accounts Payable, General Led

Add Update Delete Edit Role View Changes

Filter active set

Product Module Go

- Lists assigned roles w/
 - Status (Active/inactive)
 - Start/end date
 - Module access
- Provides ability to manage roles for a user

User Account – Effective Perms



Roles | **Effective Permissions** | Data Access | Attributes | Menu | Workflow Detail

Product	Module	Permission	Value	Granted by
Financial Management	Accounts Payable	Access to the Object when PO is liquidated	Yes	Superuser, system administrator
Financial Management	Accounts Payable	Access to the Org when PO is liquidated	Yes	Superuser, system administrator
Financial Management	Accounts Payable	Access to the Project when PO is liquidated	Yes	Superuser, system administrator
Financial Management	Accounts Payable	Access to the warrant in Invoice Entry	Yes	(Multiple)
Financial Management	Accounts Payable	Add vendors on-the-fly	Yes	(Multiple)
Financial Management	Accounts Payable	Allow contract liquidations in AP	Yes	Superuser, system administrator
Financial Management	Accounts Payable	Allow entry of credit memo invoices without origin	Yes	Superuser, system administrator
Financial Management	Accounts Payable	Allow vendor name maintenance	Yes	(Multiple)
Financial Management	Accounts Payable	Generate AP holding records	Yes	Superuser, system administrator

View Detail | Edit Role

- View all effective permissions for a user based upon all assigned roles
- Ability to edit role permissions (Note: this changes the role and therefore all permissions assigned to all users with this role)
- Cannot change permissions for a user, must change role permissions

User Account – Data Access



The screenshot shows a software interface with a tabbed menu at the top. The tabs are "Roles", "Effective Permissions", "Data Access" (highlighted with a red box), "Attributes" (with a warning icon), "Menu", and "Workflow Information". Below the tabs is a table with four columns: "Product", "Module", "Category", and "Access". The table lists various data access privileges for different products and modules. A "Detail" button is located at the bottom left of the table area.

Product	Module	Category	Access
Financial Management	Accounts Payable	Vendor maintenance access by type	Full
Financial Management	Budgeting	Budget object code access	Full
Financial Management	Fixed Assets	Fixed assets access by department	Full
Financial Management	General Ledger	Account/segment group access	Full
Financial Management	Inventory Control	Creation of pick tickets through requisitions only by locat	Full
Financial Management	Inventory Control	Inventory maintenance access by location	Full
Human Resources	Payroll	Applicant status maintenance access	Full

- View of all data access privileges assigned in roles
- To change access change the role

User Account - Attributes

Roles | Effective Permissions | Data Access | **Attributes** | Menu | Workflow Detail

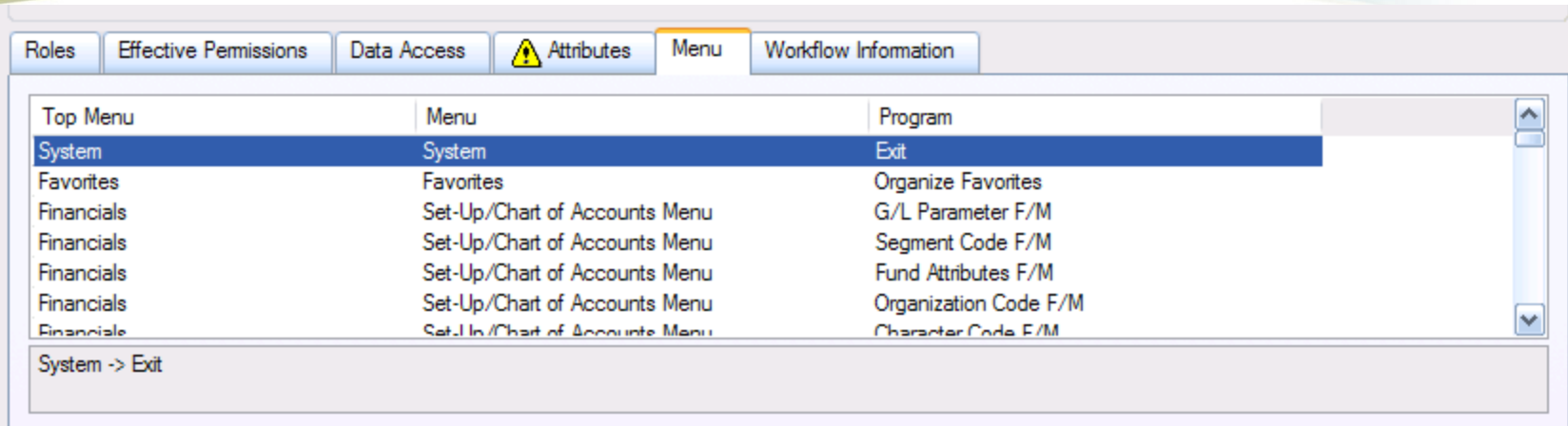
Product	Module	Attribute	Value	Value Description
Financial Management	General Ledger	Account entry method (required)	0	Org
Financial Management	General Ledger	DT/DF default fund		
Revenue Systems	Accounts Receivable	Cash receipts cash drawer type		
Revenue Systems	Accounts Receivable	Cash receipts default printer (required)		
Revenue Systems	Accounts Receivable	Cash receipts validator type (required)		
Revenue Systems	Accounts Receivable	Current payment batch number	0	

Update | View Detail | *One or more required attributes is unpopulated.

Filter active set

Product Module

- Attributes tab represents various defaults in format or policies
- Attributes are specific to each user



Top Menu	Menu	Program
System	System	Exit
Favorites	Favorites	Organize Favorites
Financials	Set-Up/Chart of Accounts Menu	G/L Parameter F/M
Financials	Set-Up/Chart of Accounts Menu	Segment Code F/M
Financials	Set-Up/Chart of Accounts Menu	Fund Attributes F/M
Financials	Set-Up/Chart of Accounts Menu	Organization Code F/M
Financials	Set-Up/Chart of Accounts Menu	Character Code F/M

System -> Exit

- Shows effective menu access based upon all assigned roles
- To change menu access requires changing in Role Maintenance

User Account - Workflow



Roles	Effective Permissions	Data Access	Attributes	Menu	Workflow Detail
<input type="checkbox"/> User is a workflow approver	<input type="button" value="Promote"/>				
<input type="checkbox"/> User is forwarding	<input type="button" value="Start"/>	Approvals will be forwarded to approver			<input type="text"/>
		Pre-approvals will be forwarded to user			<input type="text"/>
Web services security	<input type="button" value="Grant Access"/> <input type="button" value="Change Password"/>	Private access is allowed for all workflow web services. Web services password must be changed by user on next use.			
Number of business rules setup for this user:	0				
Number of pending actions for this user:	0				

- Role examples:
 - Invoice entry
 - Payroll time entry
 - Check reconciliation
 - Requisition approver
 - Named user
 - General Ledger access
 - Location access
 - Payment entry
 - Purchasing Admin
- Role permissions can span multiple modules
- Multiple roles create an access scheme for a user
- Overlapping permissions???
 - Uses the highest access

- Requisition Entry users w/GL restrictions
 - Setup a role for Req Entry
 - Menu access
 - Requisition entry permissions
 - General ledger permissions (restrict object code)
 - Setup roles for general ledger permissions for locations/departments
 - General ledger permissions for org range or segment range
 - Assign Req Entry role and a location/dept role

- The upgrade to MUNIS Version 7.X automatically migrated existing users
- Each user becomes a role (private role) and user account in the new RBS
- Tools provided to build and migrate new roles from test/train to live MUNIS

- Decide if migrating to roles or keep private roles
- Become familiar with RBS
 - Review documents on MUNIS web site (www.tyler-munis.com)
 - Review release documentation included with Version 7
- Perform analysis of roles, jobs, workflow, hierarchy etc. in your organization

- Build the new roles in test (or live)
- Verify proper operation of roles
- If new roles/users are built in test, export from test and import into live

Documentation available in the MUNIS Knowledgebase (search on “security and permissions”)

- AP Security and Permissions.doc
- BG NY Budget Entry Security and Permissions.doc
- PR Payroll Processing Security & Permissions.doc
- Etc.